

an interface link operative to couple said I/O device to said revenue meter;
said I/O device further comprising a processor; said processor operative to
provide at least one first timer value to said revenue meter.

138. (Twice Amended) A method of operating a metering apparatus, comprising:
(a) measuring the delivery of electrical energy from an energy supplier to a
consumer through an electric circuit using a revenue meter, said revenue meter
enclosed within an enclosure;
(b) locating an I/O device external to said enclosure of said revenue
meter;
(c) wherein the I/O device includes a processor; and
(d) providing at least one first timer value from the processor to said
revenue meter.

139. (Amended) The method of claim 45 further comprising:
(f) communicating at least one communications signal from said revenue
meter via an interface link.

140. (Amended) The metering apparatus of claim 29, wherein the revenue meter
comprises a second processor, the second processor being operative to communicate
with said I/O device over said interface link and said second processor being operative
to detect errors in said communication.

141. (Amended) The metering apparatus of claim 29, wherein said processor
being operative to process signals and communicate at least one I/O signal.

142. (Amended) The metering apparatus of claim 29, wherein said processor is
operative to process signals and communicate at least one I/O signal.

143. (Twice Amended) A method of operating a metering apparatus, comprising:
(a) measuring the delivery of electrical energy from an energy supplier to a
consumer through an electric circuit using a revenue meter, said revenue meter
enclosed within an enclosure;
(b) locating an I/O device external to said enclosure of said revenue
meter;
(c) wherein the I/O device includes a processor

AS FA
Cont

(d) connecting an interface link between said revenue meter and said I/O device;

(e) communicating at least one I/O signal between said I/O device and said revenue meter via said interface link; and

(f) providing at least one first timer value from the processor to said revenue meter.

85 (New) The method of claim 84 further comprising:

FO

(g) controlling the application of power to said I/O device with a second processor in said revenue meter.

86 (New) The method of claim 84 further comprising:

(g) sending at least one second timer value from said processor on said I/O device to said revenue meter, said at least one first timer value indicative of the time of transition of at least one input of said I/O device, and said at least one second timer value indicative of a time of transmission of at least one communications packet from said I/O device to said revenue meter.

87 (New) The method of claim 81 further comprising:

(f) controlling the application of power to said I/O device with a second processor in said revenue meter.

88 (New) The method of claim 72 further comprising:

(f) controlling the application of power to said I/O device with a second processor in said revenue meter.

89 (New) The method of claim 72 further comprising:

(f) sending at least one second timer value from said processor on said I/O device to said revenue meter, said at least one first timer value indicative of the time of transition of at least one input of said I/O device, and said at least one second timer value indicative of a time of transmission of at least one communications packet from said I/O device to said revenue meter.

100 (New) The metering apparatus of claim 53 wherein said processor is further operative to send at least one second timer value to said revenue meter, said at least one first timer value indicative of a time of transition of at least one input on said I/O

device, and said at least one second timer value indicative of a time of transmission of at least one communications packet from said I/O device to said revenue meter.

⁹
1191 (New) The metering apparatus of claim 53 further comprising a second processor in said revenue meter, said second processor being operative to control the application of power to said I/O device.

¹⁶
1192 (New) The metering apparatus of claim 60 wherein said processor is further operative to send at least one second timer value to said revenue meter, said at least one first timer value indicative of a time of transition of at least one input on said I/O device, and said at least one second timer value indicative of a time of transmission of at least one communications packet from said I/O device to said revenue meter.

¹⁶
1193 (New) The metering apparatus of claim 60 further comprising a second processor in said revenue meter, said second processor being operative to control the application of power to said I/O device.

¹⁹
1194 (New) The metering apparatus of claim 61 wherein said processor is further operative to send at least one second timer value to said revenue meter, said at least one first timer value indicative of a time of transition of at least one input on said I/O device, and said at least one second timer value indicative of a time of transmission of at least one communications packet from said I/O device to said revenue meter.

¹⁹
1195 (New) The metering apparatus of claim 61 wherein said second processor is operative to control the application of power to said I/O device.

²⁵
1196 (New) The metering apparatus of claim 64 wherein said processor is further operative to send at least one second timer value to said revenue meter, said at least one first timer value indicative of a time of transition of at least one input on said I/O device, and said at least one second timer value indicative of a time of transmission of at least one communications packet from said I/O device to said revenue meter.

²⁵
1197 (New) The metering apparatus of claim 64 further comprising a second processor in said revenue meter, said second processor being operative to control the application of power to said I/O device.

³⁰
1198 (New) The metering apparatus of claim 71 wherein said processor is further operative to send at least one second timer value to said revenue meter, said at least one first timer value indicative of a time of transition of at least one input on said I/O

F8 device, and said at least one second timer value indicative of a time of transmission of at least one communications packet from said I/O device to said revenue meter.

~~32~~ 30 (New) The metering apparatus of claim 1 further comprising a second processor in said revenue meter, said second processor being operative to control the application of power to said I/O device.--

REMARKS

Further to the Supplemental Notice of Allowance mailed September 12, 2002 and the Notice of Allowance mailed August 14, 2002, claims 29, 38, 42, 44-46 and 52-84 stand allowed as amended. Due to a misunderstanding between the Applicants' attorney and the Examiner regarding whether the Applicants' attorney authorized amendments during the telephone interview conducted on August 8, 2002, Applicants are filing this Preliminary Amendment with a Continued Prosecution Application (CPA) to amend the claims to better describe Applicants' invention. During a subsequent telephone conference, the Examiner indicated that the claims as amended in this Preliminary Amendment should be patentable. In addition, claims 61, 63 and 65 have been amended to correct antecedent basis problems introduced by the amendment of claim 29 in the Notice of Allowance. Claim 68 was a duplicate of claim 60 and therefore has been cancelled without prejudice. Similarly, claim 42 was a duplicate of claim 44 and was therefore cancelled without prejudice.

43

F